

PATENT
IBM Docket No. RPS920010102US1

Amendments to the Specification:

Please replace the paragraph beginning at page 4, line 17 with the following paragraph:

The calendar includes a search region, preferable in a memory, containing multiple consecutive locations. Each location includes a status bit or indicator bit and space to store information. The indicator bit can be set in one state when data is stored in the space and another bit state when there is no data. The search region is partitioned into multiple segments. Each segment, containing a portion of the locations of the search region, is searched from a Search Starting Point (CP) by a Segment Search engine in accordance with predetermined algorithms and certain assumptions regarding CP.

Please replace the paragraph beginning at page 25, line 13 with the following paragraph:

Figure 10 shows a flow diagram for the algorithm that is used to execute SegSearch3. The flow diagram can be used by someone skilled in the art to generate the logic that goes into block 50 (Fig. 5) ~~To generate the logic.~~ The search begins in block 82 and ends in block 96. In particular, the algorithm for SegSearch3 begins in block 82. SegSearch3 begins by initializing a counter used to represent the locations in the segment (k) is initialized to a value of zero, which is the lowest (bottommost) calendar entry of the segment in block 84. Block 86 is the decision block which checks for a Status value of 1 for the segment location corresponding to k. If the answer to block 88 is yes, then a SegSearch3, then a SegSearch 3 winner has been found at segment location k, as indicated in block 94, and SegSearch3 is complete. If the answer to block 86 is no, then k is incremented by a value of one, as shown in block 88,

PATENT
IBM Docket No. RPS920010102US1

and decision block 90 is entered. Decision block 90 compares the value of k to m, which is the highest (topmost) calendar entry of the segment. If the answer to block 90 is yes, then no winner for ~~SegSearch3~~ SegSearch3 has been found, as shown in block 92, and SegSearch3 is over. If the answer to block 90 is no, then decision block 86 is reentered. The repeating sequence of checking the calendar status bit (decision block 86), followed by comparing the value of k to the topmost segment location (decision block 90) is repeated until either (1) the answer to block 86 is yes, indicating that a winner has been found at location k, or (2) the answer to block 90 is yes, indicating that there is no winner ~~has been~~ found for the segment.

Please replace the paragraph beginning at page 30, line 5 with the following paragraph:

Even though illustrative embodiments of the present invention have been described ~~here-within~~ herein with references to the accompanying drawings, it is to be understood that the invention is not limited to those precise embodiments and that various other changes and modifications may be affected therein by one skilled in the art without departing from the scope or spirit of the invention.